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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,466	11/20/2001	Nobuyuki Iwasaki	SAE-026	8723

20374 7590 05/05/2003

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EXAMINER

HESS, BRUCE H

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 05/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A24

Office Action Summary

Application No.

09/988,466

Applicant(s)

Iwasaki et al.

Examiner

Bruce Hess

Group Art Unit

1774

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 2-20-02 (IDS) and 5-20-02 (IDS)
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-18 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-18 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☒ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2 and 3 ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

1. Claims 16 and 18 are rejected under 35 U.S.C. 112, first paragraph, as being based upon a non-enabling disclosure. In particular, these claims recite a foreign test standard (i.e., JIS K 5101).

This rejection can be overcome by either (1) submitting a translation of the standard or (2) incorporating the standard into the specification.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent to Heneghan et al (WO 00/35679).

This patent teaches heat-sensitive recording material comprising a support and a heat-sensitive recording layer containing N-p-toluenesulfonyl-N'-3- (p-toluenesulfonyloxy) phenylurea as a color developer, a fluorine dye which can have a melting point of 190⁰C to 230⁰C and at least one pigment (e.g., aluminum hydroxide, silica or talc). A sensitizer (e.g., 1, 2-di-3 (-methylphenoxy) ethane) can be employed. An undercoating and a protective layer can be present. The undercoating can contain binder and inorganic pigments and/or resin particles. The protective layer can employ a film-forming binder and a pigment. Heneghan et al prefer such leuco dyes as 3-diethylamino-6-methyl-7-anilino-fluoran and 3-(N-ethyl-p-toluidino)-6-methyl -7-anilino fluorine. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results.

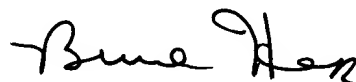
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See Heneghan et al at page 7, lines 11-18 and 24; page 8, line 25; page 9, lines 23, 28 and 29; page 17, lines 4 and 5; page 18, line 25; page 19, lines 9-11, 26 and 27; and page 20, lines 3 and 15-19.

Taylor et al (WO 01/72527) are cited for their disclosure of heat-sensitive recording material employing anilino fluorine leuco dyes with N-p-toluenesulfonyl-N¹-3-(p-toluenesulfonyloxy) phenylurea as a color developer.

Any inquiry concerning this communication should be directed to Bruce Hess at telephone number (703) 308-2402.

B. Hess/dh
April 28, 2003

A handwritten signature in black ink, appearing to read "Bruce Hess", with a stylized flourish at the end.

BRUCE H. HESS
PRIMARY EXAMINER